March 1, 2004

# **VIA ELECTRONIC MAIL**

Honorable Kristi Izzo, Secretary New Jersey Board of Public Utilities Two Gateway Center Newark, NJ 07101

**RE:** In the Matter of the Review Of Unbundled Network Elements

Rates, Terms and Conditions BPU Docket No.: TO00060356

Dear Secretary Izzo:

Enclosed please find an original and ten copies of the Initial Brief being filed on behalf of the Division of the Ratepayer Advocate in connection with the above referenced matter.

Copies are being sent to all parties via electronic mail and hard copies are being provided either by hand delivery or UPS Overnight Mail.

We are enclosing one additional copy of the materials transmitted with a stamped self-addressed envelope. Please stamp and date the copy, as filed, and return in the enclosed envelope. Thank you for your consideration and assistance.

Very truly yours,

SEEMA M. SINGH, ESQ. RATEPAYER ADVOCATE

By: \_\_\_\_\_\_Ava-Marie Madeam, Esq.
Asst. Deputy Ratepayer Advocate

AMM/lg c: Service List

# BEFORE THE STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

| IN THE MATTER OF THE REVIEW OF | )                           |
|--------------------------------|-----------------------------|
| UNBUNDLED NETWORK ELEMENTS     | ) BPU DOCKET NO. TO00060356 |
| RATES, TERMS AND CONDITIONS    | )                           |

# INITIAL BRIEF OF THE NEW JERSEY DIVISION OF THE RATEPAYER ADVOCATE

# SEEMA M. SINGH, ESQ. RATEPAYER ADVOCATE

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March 1, 2004

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# TABLE OF CONTENTS

| EXECU | JTIVE    | SUMMARY  | . 1      |
|-------|----------|--|----------|
| PROCI | EDURA    | L HISTORY  | . 3      |
| POINT | I. DE    | PRECIATION   | . 7      |
|       |          | OARD SHOULD REJECT DR. LACEY'S RECOMMENDATIONS   |          |
|       |          | HE USE OF GAAP LIVES IN CALCULATING DEPRECIATION ADOPT THE MID-POINT BETWEEN THE LIVES ADOPTED   |          |
|       |          | 2 AND THE HIGH END OF THE FCC RANGE  | 7        |
|       | A.       | Dr. Lacey Lacks Credibility and His Testimony Should Be Deemed Unreliable  |          |
|       | A.<br>B. | The Board Should Reject Verizon NJ Claims that Increased   | . 9      |
|       | Ъ.       | Competition Affects Depreciation Lives   | 12       |
|       | C.       | Verizon NJ's Benchmarking Approach in Determining Depreciation   | 12       |
|       | С.       | Lives is Deficient   | 13       |
|       | D.       | Verizon NI's Inclusion of Negative Net Salvage Value in  |          |
|       |          | Depreciation Rates is Improper   | 15       |
| DOINT |          | ST OF CAPITAL  |          |
| POINT |          | ATEPAYER ADVOCATE'S RECOMMENDED 9.50% COST OF EQUITY   |          |
|       |          | SED ON THEORETICALLY VALID AND PROPERLY  |          |
|       |          | ULATED DCF ANDRISK PREMIUM/CAPM METHODS  |          |
|       |          | ISTENT WITH CURRENT MARKET CONDITIONS AND  |          |
|       |          | LD BE ADOPTED BY THE BOARD   | 17       |
|       | Introdu  |  |          |
|       | A.       | Cost of Equity   | 17       |
|       |          | Cost of Equity   | 20       |
|       | B.       | Capital Structure/Cost of Debt   | 21       |
|       | C.       | The Cost Of Equity Should Be No Higher Than Required By Investors  |          |
|       |          | To Buy Or Hold the Stock   | 23       |
|       | D.       | The Cost Of Equity Recommendation Of The Ratepayer Advocate Is   |          |
|       |          | Properly Calculated And Based On Methodologies Accepted By   |          |
|       |          | The Investment Community, Whereas The Company's Cost Of Equity   |          |
|       |          | Recommendation Is Based On Flawed Methodologies And  | •        |
|       |          | Improper Calculations  |          |
|       |          | 1. DCF Methods   | 24       |
|       |          | <ol> <li>Implementation of Single-Stage DCF</li> <li>Implementation Multi-Stage DCF</li> </ol>   | 26       |
|       | E        | 3. Implementation Multi-Stage DCF  | 27       |
|       | E.<br>F. | Analysis of Company Position Regarding Cost of Capital   | 27       |
|       | г.       | Risk Premium/CAPM Method   | 32<br>35 |
|       |          | THE PRINCE OF SUMBLE FOR A SUMBLE OF THE PRINCE OF THE PRI | -)-)     |

| POINT III. TELCORDIA SWITCHING MODEL |                  |
|--------------------------------------|------------------|
| THE RATEPAYER ADVOCATE RECOMMEND     | OS THAT          |
| THE BOARD REJECT THE TELECORDIA MOD  | DEL AS DEFECTIVE |
|                                      |                  |
| CONCLUSION                           |                  |

### **EXECUTIVE SUMMARY**

In this proceeding the New Jersey Board of Public Utilities ("Board") is reexamining the inputs for depreciation and cost of capital used by states in setting Total Long Run Incremental Cost ("TELRIC") compliant rates. The TELRIC methodology requires that costs and prices be based on the use of the most efficient technology available and the lowest-cost network configuration, given existing wire center locations, and forbids consideration of embedded costs. The Ratepayer Advocate contends that the cost of capital inputs and depreciation inputs proposed by Verizon New Jersey ("Verizon NJ") in this proceeding are not TELRIC compliant and use of these inputs will result in Unbundled Network Elements ("UNE") rates that will impede the development of future competition in New Jersey.

The Ratepayer Advocate recommends that the Board reject Verizon NJ's proposal to use Generally Accepted Accounting Principles ("GAAP") depreciation lives in computing TELRIC recurring and nonrecurring costs because Verizon NJ fails to demonstrate that GAAP lives are economic lives and would replicate the results that would be anticipated in a competitive marketplace. Furthermore, the use of GAAP lives would substantially increase the prices for UNEs, and therefore would unfairly require competitors and consumers to subsidize Verizon NJ's pursuit of its business plans that do not relate to the supply of wholesale UNEs, such as the development of broadband and fiber-based services. If the Board does reconsider depreciation, the Ratepayer Advocate recommends that the Board should increase depreciation lives to a midpoint between the most recently established Board lives and the high end range that the Federal Communications Commission ("FCC") has established. In the alternative, the Board should reaffirm its earlier findings and rely on the lives that were established in 2001. The Ratepayer Advocate contends that the credibility of the Verizon NJ witnesses are huge concerns in this proceeding because they have failed to provide complete and accurate information upon which the Board must rely in making a well-informed decision. These concerns undermine Verizon NJ's entire case.

The Ratepayer Advocate urges the Board to adopt a weighted cost of capital of 7.10%...

The Ratepayer Advocate proposes a 9.5% cost of equity based on a combination of the Discounted Cash Flow ("DCF") and the risk premium/Capital Asset Pricing Model ("CAPM") methods. The Ratepayer Advocate also proposes an 6.06% cost of debt and a debt/equity ratio of 43.60% equity, 9.30% short term debt, and 47.1% long term debt.

In 1997, the Board set the weighted cost of capital at 10.4% which was premised upon a competitive market. That 10.4% rate, adjusted today, would yield a weighted cost of capital consistent with the Ratepayer Advocate's recommended weighted cost of capital of 7.10%, which is far lower than VNJ's proposed weighted cost of capital of 15.98%.

Verizon NJ's proposed changes to depreciation and cost of capital would result in drastic increases to wholesale revenues to the detriment of achieving competition in the local telecommunications marketplace, and therefore to the ultimate detriment of consumers.

The Ratepayer Advocate also has concerns about the Telcordia switching model and how it addresses investment for various vertical features with respect to the type of switch. As a result, the Ratepayer Advocate submits that the Telcordia switching model overstates costs and its handling of the five vertical features is arbitrary and capricious. The Ratepayer Advocate recommends that the Board eliminate this overstatement and reaffirm its prior determination.

The Ratepayer Advocate also recommends that if the Board changes any of the inputs under consideration, the Board make the rates derived from those changed inputs interim subject to refund and true up pending a further proceeding to examine TELRIC inputs and other developments related to the FCC's Triennial Review Order ("TRO") and Virginia Arbitration Order. Setting of interim rates

Limbor Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, and Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking (rel. August 21, 2003) ("Triennial Review Order"); I/M/O Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration, CC Docket No. 00-218; In the Matter of Petition of AT&T Communications of Virginia Inc., Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia Corporate Commission Regarding Interconnection

may preclude the problem identified in *AT&T Communications of Illinois, Inc. v. Illinois Bell Telephone Co.*, 349 F.3d 402 (7th Cir. 2003).

### PROCEDURAL HISTORY

The Board issued its first decision setting UNE rates on December 2, 1997. See Decision and Order, In the Matter of the Investigation Regarding Local Exchange Competition for Telecommunications Services, Docket No. TX95120631 (Dec. 2, 1997) ("Generic Order"). In the Generic Order, the Board set initial rates, terms, and conditions for access to UNEs consistent with the TELRIC methodology articulated by the FCC in its Local Competition Order. Following the release of the Board's Generic Order, AT&T challenged the Board's decision in district court. See AT&T Communications of New Jersey, Inc. et al v. Bell Atlantic-New Jersey, Inc. et al., Civ. Nos. 97-5762 (KSH) and 98-0109. The Ratepayer Advocate participated in the appeal as an intervener. On June 6, 2000, the United States District Court for the District of New Jersey determined that in its 1997 Generic Order the Board's "assignment of numeric percentages to models the Board found were flawed and amounts to arbitrary and capricious rule making," and remanded the rates back to the Board for a new determination. AT&T v. Bell Atlantic-New Jersey, Civ. No. 97-5762 and 98-0109, Opinion at 30 (D.C.N.J. June 6, 2000) ("AT&T v. BA-NJ").

In accordance with the District Court's decision, the Board conducted another review of the UNE rates which was completed on November 20, 2001. See Decision and Order, I/M/O the Board's Review of Unbundled Network Elements Rates, Terms and Conditions of Bell Atlantic-New Jersey, Inc., Docket No. TO00060356 (March 6, 2002) ("Final Order"). The Final Order adopted modified inputs and assumptions used in the cost models to calculate recurring and non-recurring rates, and established the terms and conditions under which certain advanced services would be made available to CLECs. The Final Order reduced many of the wholesale rates that Verizon NJ

Disputes With Verizon Virginia Inc., CC Docket No. 00-251, Memorandum Opinion and Order (rel. August 29, 2003) ("Virginia Arbitration Order")

had been charging CLECs pursuant to the *Generic Order*. Following the release of the Board's Final Order, WorldCom, AT&T, and the Ratepayer Advocate filed motions for reconsideration alleging that the Board erred in rendering its decision.

After reviewing the reconsideration requests, the Board rendered its decision on reconsideration at its July 15, 2002 Agenda Meeting. *See* Decision and Order, *I/M/O the Board's Review of Unbundled Network Elements Rates, Terms and Conditions of Bell Atlantic-New Jersey, Inc.*, Docket No. TO00060356 (September 13, 2002). ("Order on Reconsideration").

Subsequent to the release of the Board's Order on Reconsideration, Verizon NJ filed a Complaint in United States District Court for the District of New Jersey on November 7, 2002, pursuant to the Telecommunications Act of 1996 ("1996 Act") (47 U.S.C. §252(e)(6)). Verizon New Jersey Inc. v. the New Jersey Board of Public Utilities, an agency, and Jeanne M. Fox, in her official capacity as President fo the New Jersey Board of Public Utilities, Frederick F. Butler, in his official capacity as Commissioner of the New Jersey Board of Public Utilities, Connie O. Hughes, in her official capacity as Commissioner of the New Jersey Board of Public Utilities, Carol J. Murphy, in her official capacity as Commissioner of the New Jersey Board of Public Utilities, and Jack Alter, in his official capacity as Commissioner of the New Jersey Board of Public Utilities, Civil Action No. 02-5353 (JAP). The Complaint was filed against both the Board and the individual commissioners in their official capacities and consisted of three counts. In its Complaint, Verizon NJ requested that the case be remanded to the Board for further review of the inputs and assumptions used to develop the UNE rates for compliance with the FCC's TELRIC methodology. Count One alleged that the UNE rates established by the Board failed to comply with the FCC's TELRIC methodology, as set out in the Act and its implementing regulations. Count Two alleged that the Board's UNE rates are below Verizon NJ's actual costs and that they constitute an unconstitutional taking under the Fifth and Fourteenth Amendments to the U.S. Constitution. Count Three alleged that the Board's action further constituted a violation of Verizon NJ's civil rights under 42 U.S.C. §1983. The Board filed an Answer to Verizon NJ's Complaint on December 23, 2002.

On November 26, 2003, Verizon NJ filed a Motion for Leave to File and Serve an Amended Complaint expanding its complaint to include three additional counts. Proposed Counts Four and Five allege that the UNE rates established by the Board violate the Fifth and Fourteenth Amendments on additional grounds. Proposed Count Six alleges that the UNE rates adopted by the Board in the Order for Reconsideration are inconsistent with the Board's findings and are arbitrary, capricious, and unreasonable. MCI, AT&T, and the Board filed responses to the proposal by Verizon NJ to amend its Complaint.

In its Triennial Review Order released on August 21, 2003, the FCC has provided new, additional guidance to states that may affect the UNE rates established by the states in following the FCC's TELRIC methodology. The FCC provided clarification on two key inputs used by states to set TELRIC-compliant rates: depreciation and cost of capital. Since Verizon NJ's complaint is implicitly premised on its belief that these key inputs are not TELRIC compliant, the Board Staff entered into negotiations with Verizon NJ to discuss the practicality of reviewing these inputs for TELRIC compliance as part of a joint settlement.

As a result of the joint settlement discussions and in an attempt to resolve the dispute without protracted litigation, the Board, at its December 17, 2003 Agenda Meeting, authorized its legal counsel from the Division of Law to execute a Stipulation and Agreement on behalf of the Board in *Verizon New Jersey Inc. v. the New Jersey Board of Public Utilities, an agency, and Jeanne M. Fox, in her official capacity as President fo the New Jersey Board of Public Utilities, Frederick F. Butler, in his official capacity as Commissioner of the New Jersey Board of Public Utilities, Connie O. Hughes, in her official capacity as Commissioner of the New Jersey Board of Public Utilities, Carol J. Murphy, in her official capacity as Commissioner of the New Jersey Board of Public Utilities, and Jack Alter, in his official capacity as Commissioner of the New Jersey Board of Public Utilities, Civil Action No. 02-5353 (JAP). According to the terms of the Stipulation and Agreement, Verizon NJ has agreed to withdraw its Complaint, without prejudice, in exchange for an expedited review by the Board of the depreciation and cost of capital inputs that were used to calculate* 

the current rates associated with UNEs that Verizon NJ is required to provide to CLECs. Evidentiary hearings in this matter were concluded on February 20, 2004 and the Board is expected to issue its decision by March 31, 2004.

# POINT I. DEPRECIATION

THE BOARD SHOULD REJECT DR. LACEY'S RECOMMENDATIONS FOR THE USE OF GAAP

# LIVES IN CALCULATING DEPRECIATION AND ADOPT THE MID-POINT BETWEEN THE LIVES ADOPTED IN 2002 AND THE HIGH END OF THE FCC RANGE.

According to John M. Lacey, Verizon NJ's depreciation witness, GAAP should be used to calculate depreciation lives utilized in UNE cost studies and that Verizon NJ's proposed depreciation lives are consistent with GAAP. Lacey Testimony, p. 4, *Exhibit R-VNJ-1* The Ratepayer Advocate's depreciation witness, Susan M. Baldwin disagrees with Dr. Lacey's approach because the net effect of using GAAP to calculate depreciation lives would result in shorter lives thereby increasing TELRIC prices that Verizon NJ charges for wholesale services it offers its competitors. Baldwin Testimony, p.13, *Exhibit R-RPA-1*. Dr. Lacey admitted this fact at hearings in this proceeding. T 33:17-24 (2/17/04). The Board should avoid this outcome by setting "conservative" lives in order to protect the interests of consumers because just as Verizon NJ is responsible to their investors, the Board is equally responsible for balancing investors' interests against consumers' interest.

Moreover, the use of GAAP in computing UNE prices have been rejected by both the Board and the FCC. The Board rejected Verizon NJ's proposed lives based on 1999 GAAP "because they were incorrectly based upon financial accounting lives." Final UNE Order at 43. The Board stated further:

While Verizon referred to its proposed depreciation rates as economic lives, it acknowledged that the 1999 GAAP lives are consistent with the lives it used for financial accounting. We agree with Worldcom that financial lives are not a suitable proxy for economic lives and will artificially inflate costs and potentially impede competition . . . We are guided in our decision by the parties that have suggested that financial accounting lives are driven by corporate objectives, and by the accounting world's belief that it is better to overstate costs than to understate them for financial reporting purposes.

#### Id. at 43-44.

The Board is not alone in its disapproval of the use of GAAP lives in setting UNE prices because other state commissions have adopted the FCC prescribed lives for use in TELRIC calculations. For example, in 2002, the Maine Commission adopted the lives prescribed by the FCC for use in UNE costs, as did the Pennsylvania Commission in a Tentative Order. Maine PUC, Docket

No. 97-505 (Feb. 12, 2002); Pennsylvania PUC, Docket NO. R-00016683 (Oct. 24, 2002). Affirmed in Final Decision and Order (Nov. 13, 2003) In 2003, the Georgia Commission reaffirmed its 1997 decision to use FCC prescribed lives, and the Maryland Commission adopted lives based upon the ranges prescribed by the FCC. Georgia PUC, Docket No. 14361-U (March 18, 2003); Maryland PUC, Case No. 8879 (June 30, 2003). *See Exhibit R-ATT-3*. In August 2003, the FCC's Wireline Competition Bureau standing in the place of the Virginia State Corporation Commission, adopted lives based upon the FCC's prescribed ranges. Virginia Arbitration Order, at para. 12.

The FCC specifically addressed the relationship between the depreciation lives that an ILEC uses and the development of competition, and stated that any depreciation lives shorter that what is prescribed within the FCC's high/low range could have a substantial harmful impact on competition because the ILECs "could independently establish depreciation rates that could result in unreasonable high interconnection and UNE rates, which competitors would be compelled to pay in order to provide competing local exchange service." 1998 Biennial Review of Depreciation Requirements at ¶ 28. The FCC also stated in its TELRIC Notice of Proposed Rulemaking ("NPRM") that it has been reluctant to rely on GAAP lives in past decisions because that "might permit companies to adopt depreciation methods that result in excessive depreciation expense." *Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers*, WC Docket No. 03-173, *Notice of Proposed Rulemaking* (rel. September 15, 2003) ("TELRIC NPRM")

Not only is Mr. Lacey's reliance on GAAP lives in calculating UNE rates misplaced but he has also failed to demonstrate that either competitive pressures or technological changes have caused the lives established by the FCC to be outdated or that the use of GAAP lives is a superior method for measuring economic depreciation lives. Baldwin Testimony, pp.13-15, *Exhibit R-RPA-1*. Furthermore, Mr. Lacey does not provide any empirical support justifying the use of GAAP lives in Verizon NJ's TELRIC studies. *Id.* Dr. Lacey simply states that depreciation lives using GAAP "are the best available lives for computing the actual, forward-looking, anticipated economic life of assets"

Lacey Testimony, p.4, *Exhibit R-VNJ-1* and "best serve the ratepayers of New Jersey." T 32:16-17 (2/17/04). The Ratepayer Advocate submits that shorter depreciation lives will be detrimental to ratepayers and beneficial to Verizon NJ because it can pass on the cost of that accelerated depreciation to consumers (indirectly) and competitors (directly) through UNE rates. Baldwin Testimony at 13. Furthermore, the Massachusetts Department of Telecommunications and Energy (DTE) recently rejected Verizon MA's proposal to use GAAP lives in calculating TELRIC costs, finding that, although companies that use GAAP may protect the interests of investors, "the use of GAAP, as the FCC has noted does not necessarily serve the interests of ratepayers." *Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided-Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts, Massachusetts DTE 01-20, Order, July 11, 2002, at 88-89.* 

# A. Dr. Lacey Lacks Credibility and His Testimony Should Be Deemed Unreliable

Dr. Lacey's testimony argued for the use of GAAP for purposes of setting depreciation lives for UNEs. On cross examination, Dr. Lacey for the first time informs the Board and the parties that he is in fact recommending a hybrid of GAAP which includes GAAP lives and FCC's permitted use of negative net salvage. As shown by the response to RAR-DEP-16, *Exhibit R-RPA-5*, Verizon NJ has eliminated negative net salvage in all categories except circuit equipment as being consistent with GAAP. This fact was not disclosed in any of Dr. Lacey's testimonies. Only due to the repeated discovery requests did Verizon NJ produce internal reports that show that negative net salvage is no longer used in connection with its GAAP lives. Dr. Lacey never acknowledges in his testimonies that GAAP discontinued using negative net salvage or especially that he was recommending a hybrid of GAAP. On cross-examination Dr. Lacey acknowledged this fact. Dr. Lacey gave sworn responses on the documents he reviewed in preparation of his testimony. *See* RAR-DEP-18, *Exhibit R-ATT-1*. The documents produced in response to RAR-DEP-16 are not listed therein. Attachment A to *Exhibit* 

*R-RPA-5*, clearly shows that in October 2003, Verizon NJ changed its policy in response to FSAB 143 and removed negative net salvage. This attachment also show that Outside Plant ("OSP") was changed from 8 years to 9 years. Attachment B contained in Dr. Lacey's direct testimony show 9 years but he failed to mention that negative net salvage value had been retained even though Verizon NJ eliminated it except for circuit equipment account 2232.

Furthermore, the record shows that Dr. Lacey lacks personal knowledge of the methodology used by Verizon in setting its depreciation lives as evidenced by his testimony in which he states: "I understand that Verizon NJ looks at information from a variety of sources . . ." and "It is my understanding that, as a starting point, Verizon NJ uses the panoply of factors . . ." Lacey Testimony, p.13, Exhibit R-VNJ-1. In addition, Mr Lacey admitted on cross-examination that he was not responsible for setting Verizon's lives, but only reviewed the process undertaken by Verizon and basically gave it his stamp of approval.

I don't set Verizon's lives, I have observed the process over the past seven years working with people from Verizon, looking at what they do, looking at the factors that they consider, the documents that they review, the people they talk to. So I understand this to be true. I also have seen the audited financial statements of Verizon, where the auditors opined that the financial statements are consistent with GAAP, which indicates that the auditors agree.

#### T34:22-T35:2-9 (2/17/04) (emphasis added).

The discovery responses to several depreciation questions propounded by the Ratepayer Advocate also reveal that Dr. Lacey's statements are not based on his personal knowledge of Verizon NJ's setting of depreciation lives but is instead based on statements of Verizon personnel or documents generated by Verizon NJ which is tantamount to multiple hearsay. *See* Verizon NJ responses to RAR-DEP-3, 4, 6, 9, *Exhibit R-RPA-8*, RAR-DEP16-supplemental, *Exhibit R-RPA-5*, RAR-DEP-18-supplemental, *Exhibit R-ATT-1*. Although hearsay is generally admissible in administrative proceedings, the residuum rule requires that "some legally competent evidence must exist to support each ultimate finding of fact to an extent sufficient to provide assurances of reliability and to avoid the fact or appearance of arbitrariness." *See R*. 1.1-15.5. Dr. Lacey's testimony runs afoul of the residuum rule because the statements made within are

not based on Dr. Lacey's personal knowledge and the information upon which Dr. Lacey relied are hearsay. The fact that Dr. Lacey has not been very forthcoming with information regarding what he knew affects his credibility and undermines his recommendation. Dr. Lacey's response to a transcript request made by the Ratepayer Advocate at hearings on February 17, 2004, T 167, is further evidence of Dr. Lacey's lack of candor in this proceeding. The transcript request response states:

The following data was reviewed by Dr. Lacey prior to producing his testimony in this proceeding:

- the depreciation lives and future net salvage values provided in response to Ratepayer Advocate Request # RAR-DEP-17
- plant account data provided in response to Ratepayer Request # RAR-DEP-41
- actuarial and cost removal data provided in response to Ratepayer Request #RAR-DEP-61
- correspondence to the Verizon Senior Vice President and CFO provided in response to Ratepayer Request #RAR-DEP-16.

If one accepts the answer at face value, then, Dr. Lacey's response to RAR-DEP-18 is wrong. In addition, if he did in fact review RAR-DEP-16 prior to filing his initial testimony, then why did he not acknowledge that he is recommending a GAAP hybrid and that Verizon NJ had discontinued the use of negative net salvage with the sole exception of circuit equipment. If Dr. Lacey only reviewed the documents in RAR-DEP-16 after filing his initial testimony, his response is evasive and misleading. The Board should not adopt Verizon NJ's arguments, since the record evidence demonstrates that Verizon NJ failed to provide full, accurate, and complete information upon which the Board must rely in making its decision.

Dr. Lacey also lacks the requisite knowledge of how Verizon NJ calculates its proposed depreciation rates. Dr. Lacey's testimony simply states that Verizon uses a "panoply of factors" to reflect technological and competitive developments and that Verizon NJ "looks at information from a variety of sources, including its own capital spending budgets and engineering plans concerning the retirement of equipment" as well as "information concerning the current and anticipated levels of facilities-based competition". Baldwin Testimony, p. 16, *Exhibit R-RPA-1*. However, Dr. Lacey's statements are mere bald assertions and lack empirical support on how entry of a new competitor in the marketplace would cause a change in the calculation of the depreciation life for a particular account. Instead, Dr. Lacey's

testimony summarizes GAAP and accounting principles but provides no independent or verifiable support for Verizon NJ's analyses and information that purportedly justify the use of GAAP lives. *Id.*, p.17. The Ratepayer Advocate submits that Verizon NJ has failed in this record to describe and provide support for its specific underlying assumptions about competition, technology, and/or other factors upon which the company relies to develop its GAAP lives. As such, Verizon NJ's proposal to substitute GAAP lives for the lives currently being used by the Board in setting depreciation should be rejected as unfair to ratepayers and competitors alike.

# B. The Board Should Reject Verizon NJ Claims that Increased Competition Affects Depreciation Lives

Dr. Lacey points to increased competition in the local telephone market as a reason depreciation lives should be shortened and states in his testimony that "Verizon NJ considered the decline in its depreciable assets' value due to factors such as competition, technological change, and the inherent risk in providing UNEs." Lacey Testimony, p. 22, *Exhibit R-VNJ-1*. However, competition has been steadily rising in New Jersey since 1999 as indicated in the latest FCC Local Competition Status Report. See Attachment D. Although competition has risen since 1999 depreciation lives have remained for the most part unchanged by Verizon NJ. The fact that Verizon NJ have not shortened depreciation lives in spite of increased competition over the years undermines Dr. Lacey's position that competition justifies the use of GAAP lives. T 222:13-23 (2/17/04)

According to Dr. Lacey "GAAP lives appropriately account for the anticipated 'impact of future technologies' (and thus are inherently forward-looking), as well as actual and anticipated competition, among other factors that may affect an asset's economic life." Lacey Testimony, p. 4, *Exhibit R-VNJ-1*. This is yet another example of Verizon NJ's flawed reasoning. What Verizon NJ fails to realize is that even if effective local competition were present in New Jersey, the discipline of a competitive marketplace would require Verizon NJ to use only GAAP lives for pricing UNEs and not the hybrid proposed by Dr. Lacey. The FCC in the TRO provided guidance on this issue when it directed the states, in setting depreciation rates, to establish lives that "reflect the actual decline in value that would be anticipated in the competitive market

TELRIC assumes," The FCC further states that its "economic depreciation requirement is designed to replicate the results that would be anticipated in a competitive marketplace." *See* Triennial Review Order, ¶ 689. Contrary to Verizon NJ's proposal, the lives that the Board most recently set are economic and replicate those found in a competitive marketplace for basic UNEs. In light of the changes announced for fiber and broadband services, the Board should raise the depreciation lives to the midpoint between the lives most recently established by the Board and the high end of the FCC-established range to reflect the fact that Verizon has not retired that portion of the network it uses to supply UNEs and the fact that the underlying infrastructure continues to be available for that supply. Baldwin Testimony, p. 26, *Exhibit R-RPA-1*.

In response to RAR-DEP-5, Verizon NJ indicated that information on available capacity was available from ARMIS data filed with the FCC. Attachments B and C show the availability of cooper and non-cooper per the ARMIS reports. It is clear that cooper is not being added and at the same time Verizon NJ is expanding its digital subscriber line service. *See Exhibits R-RPA-7, R-RPA-8* These facts support the fact that cooper will still be used for the foreseeable future and life for cooper should be increasing not decreasing.

# C. Verizon NJ's Benchmarking Approach in Determining Depreciation Lives is Deficient

Dr. Lacey states in his testimony that Verizon NJ benchmarks its own internal calculation of depreciation lives against its competitors' lives in its final determination of depreciation lives. Lacey Testimony, p.14, *Exhibit R-VNJ-1*. The competitors referenced in Dr. Lacey's testimony include AT&T, MCI, and cable television companies. *See Exhibit R-ATT-1*. The Ratepayer Advocate submits that Verizon NJ's benchmarking arguments do not justify adoption of GAAP lives for TELRIC pupposes. First, it is unacceptable for Verizon NJ to lower its initial calculation of asset lives simply on the basis that asset lives reported by its competitors are shorter. Second, Dr. Lacey fails to provide evidence of this benchmarking process for the Board. For example, Dr. Lacey does not indicate where Verizon NJ obtained AT&T's or MCI's asset lives and whether such lives came from a regulatory proceeding or from financial reports geared towards an investor audience. Baldwin Testimony, p.27, *Exhibit R-RPA-1*. Third, the FCC has addressed

the issue of whether ILEC's depreciation lives should necessarily be on par with the depreciation lives of its competitors and stated:

The incumbent LECs also contend that they should be granted shorter Depreciation projection lives because they face actual and potential competition from interexchange carriers (IXCs) and competitive LECs, which, becasue of their depreciation is not regulated, are free to adopt shorter projection lives than the incumbent LECs. We find that the incumbent LECs fail to address several important distinctions between themselves and these other carriers. First, because we do not regulate either their depreciation rates or the prices they charge to their customers, neither the IXCs nor the competitive LECs have the ability to seek regulatory relief for expenses caused by changes in depreciation rates. Additionally, the depreciation practices of IXCs and incumbent LECs are not directly comparable because they use different types of switches and cables. Accordingly, nothing has occurred to compel a change to the Commission's previous conclusion that the characteristics of ICXs and incumbent LECs require separate analyses. We conclude, therefore, that incumbent LECs have not sufficiently demonstrated the validity of the assumptions underlying their proposed shorter lives for plant equipment categories other than digital switching equipment.

1998 Biennial Review of Depreciation Requirements, para. 18.

As pointed out by Mr. Lee in his testimony, Verizon NJ has provided even less evidence to support use of GAAP in this proceeding as it did in the Virginia Arbitration. The FCC rejected Verizon's proposal to use GAAP in that Virginia proceeding. *See* Virginia Arbitration Order, ¶ 12.

# D. Verizon NJ's Inclusion of Negative Net Salvage Value in Depreciation Rates is Improper

Verizon NJ proposes to include negative net salvage values for certain depreciable assets because "[f]rom a ratemaking perspective, it makes far more sense to include removal cost as part of the total annual investment to be depreciated so that the removal cost is recovered from all customers who are served during the asset's useful life.<sup>2</sup> Lacey Surrebuttal, p. 21, *Exhibit R-VNJ-2*. As previously discussed, this so called hybrid GAAP proposal was only disclosed on cross-examination. As such, the Ratepayer Advocate recommends that the Board rejects Verizon NJ's depreciation proposal in its entirety due to the circumspect credibility of Verizon NJ's direct case as presented by its witnesses through pre-filed direct testimony.

The Ratepayer Advocate's witness, Ms. Baldwin advocates the removal of negative net salvage values from depreciation calculations because a negative net salvage ratio increases the depreciation rate and depreciation expense. Baldwin Testimony, p. 30, *Exhibit R-RPA-1*. The principle underlying Ms. Baldwin's recommended treatment of negative net salvage was recognized by the National Association of Regulatory Utility Commissioners ("NARUC") in its publication entitled "Public Utility Depreciation Practices" ("NARUC depreciation manual"):

Some commissions have abandoned the above procedure [gross salvage and cost of removal reflected in depreciation rates] and moved to current-period accounting for gross salvage and/or cost of removal. In some jurisdictions gross salvage and cost of removal are accounted for as income and expense, respectively, when they are realized. Other jurisdictions consider only gross salvage in depreciation rates, with the cost of removal being expensed in the year incurred. *R*-66, p. 158

The NARUC depreciation manual further opines on the underlying rationale for treating removal cost as a current-period expense, instead of incorporating it in depreciation rates:

It is frequently the case that net salvage for a class of property is negative, that is, cost of removal exceeds gross salvage. This circumstance has increasingly become dominant over the past 20 to 30 years; in some cases negative net salvage even exceeds the original cost of plant. Today, few utility plant categories experience positive net salvage; this means that most depreciation rates must be designed to recover more than the original cost of plant. The predominance of this circumstance is another reason why some utility commissions have switched to current-period accounting for gross salvage and, particularly, cost of removal. *Id.*, p. 158.

Furthermore, the fact that Verizon NJ is proposing to include negative net salvage values in depreciation rates is contrary to GAAP principles which Verizon NJ has recommended in this proceeding. *See Exhibit R-RPA-5*. This is a further example of Verizon NJ not being straight forward and providing incomplete, non-current, and inaccurate information on what its actual positions are. For the reasons set forth above, the Board should reject Verizon NJ's attempt to include negative net salvage values in depreciation calculations which would result in higher depreciation rates.

Verizon NJ's depreciation proposal, if adopted, would drastically increase its wholesale rates to the detriment of competition in the local telecommunications marketplace and consumers alike. More importantly, Verizon NJ has failed to meet its burden of proof and show that its proposed lives are in fact

appropriate. As a result, the Ratepayer Advocate recommends that the Board reject Verizon NJ's proposed depreciation lives and adopt the Ratepayer Advocate's recommendation on depreciation lives.

# POINT II. COST OF CAPITAL

THE RATEPAYER ADVOCATE'S RECOMMENDED 9.50% COST OF EQUITY IS BASED ON THEORETICALLY VALID AND PROPERLY CALCULATED DCF AND RISK PREMIUM/CAPM METHODS CONSISTENT WITH CURRENT MARKET CONDITIONS AND SHOULD BE ADOPTED BY THE BOARD.

### Introduction

The Ratepayer Advocate's witness, Mr. James A. Rothschild adopted a recommended capital structure based on book value to made a recommendation on what is the forward-looking cost of capital and what are the appropriate inputs for cost of capital in this proceeding. Based upon Mr. Rothschild's Direct Testimony, the Ratepayer Advocate recommends the overall forward-looking cost of capital incurred by Verizon NJ to service its UNE investment is 7.10% and is properly based upon a cost of equity of

9.50%.

The Board must determine the appropriate weighted cost of capital, including the cost of debt, cost of equity, and debt/equity ratio. Verizon NJ's cost of capital witness in this case is Dr. James H. Vander Weide. He recommends an overall cost of capital for Verizon NJ of 15.98%. Rothschild Testimony, p. 43, *Exhibit R-RPA-2*. This extraordinarily high recommendation is based upon an alleged market value capital structure containing 75% common equity, a cost equity of 13.95%, and a cost debt of 6.26%. This produces a recommended weighted average cost of capital of 12.03%, to whichan additional risk premium of 3.95% is added to account for the so called various risks associated with TELRIC pricing. *Id.*, pp.7-8.

# A. Cost of Equity

Verizon NJ relies on the recommendations of Dr. Vander Weide. Dr. Vander Weide derives the cost of equity through a DCF method and a risk premium method. *See* Rothschild Testimony, p. 43, *Exhibit R-RPA-2*. The Ratepayer Advocate submits that Dr. Vander Weide's recommendation of 15.98% contains serious errors in the implementation of the equity costing methods relied upon, which has the effect of significantly overstating estimates of the cost of equity. As pointed out by the Ratepayer Advocate's witness, Mr. Rothschild, Dr. Vander Weide has ignored the capital structure actually chosen by management to finance the telecommunications assets of Verizon NJ and has instead, substituted a capital structure in which he uses the market value of the equity capital. Rothschild Testimony, pp. 56-57, *Exhibit R-RPA-2*. The Ratepayer Advocate opposes the use of market value capital structure because it fails to recognize that capital structure is something under the control of management. More importantly, *TELRIC* standards require the forward looking capital structure reflect the capital ratios that competent management would use if they were purchasing mostly new telecommunications equipment today. Lastly, the use of market-based capital structure is inconsistent with and contrary to the U.S. Supreme Court's findings in the landmark decision in *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 601 (1943). Rothschild's Testimony, p.45, *Exhibit R-RPA-2*.

The Ratepayer Advocate's expert witness, Mr. Rothschild, provides the appropriate basis for determining the cost of equity. The Ratepayer Advocate's position on cost of equity is fully set forth in the

testimony of Mr. Rothschild, who applied the constant growth version of the DCF method and the risk premium/CAPM method. *Id.*, p.33. Mr. Rothschild's cost of equity position is in Rothschild's Testimony, Schedule JAR-2.

As the Ratepayer Advocate's witness, Mr. Rothchild explains, the DCF cost of equity as measured for comparative telephone companies is within a range between 8.48% and 9.30% depending on whether average or end of period stock prices are used. In addition, the risk premium/CAPM method indicates a cost of equity between 8.94% and 10.00%. As a result, the Ratepayer Advocate recommends a cost of equity of 9.50%.

The Ratepayer Advocate notes that Mr. Rothschild's results are based on the proper application of the DCF and Risk Premium/CAPM methods. Mr. Rothschild correctly opined that current capital market conditions simply do not justify Verizon NJ's requested cost of equity.

The Ratepayer Advocate recommends that the overall forward-looking weighted cost of capital that is appropriate for use in this proceeding is 7.10%. This recommendation is based the consolidated capital structure of Verizon Communications, Inc., which contains 43.60% common equity, 9.30% short-term debt, 47.10% long-term debt.

It is also based on a cost of equity of 9.50%, a cost of long-tem debt of 6.43%, and a cost of short-term debts of 1.14%. (See Rothschild Testimony, Schedule 1, Page 1). Based upon Mr. Rothschild's Testimony, the Ratepayer Advocate recommends that the actual capital structure financing the operations of Verizon NJ, is VerizonCommunications, Inc., and that capital structure is appropiate. All of the common equity and some of the debt that finances the operations of Verizon NJ is issued by Verizon Communications, Inc. Moreover, as pointed out by the Ratepayer Advocate's witness Mr. Rothschild, the UNE business is a pure incremental business to Verizon-NJ, as it does not make any incremental investment in order to be able to service the UNE business. As discussed above, Attachments B and C show that spare capacity exists and that Verizon NJ has not been adding to cooper plant. See RAR-ROR-26, Exhibit R-RPA-8. Therefore, the non-diversified risk (the only kind of risk that affects the cost of equity) is lower for the UNE business than for Verizon NJ as a whole, since the retail regulated customers, and not

investors are the ones that pay for the risk of carrying spare capacity.

In addition, the Ratepayer Advocate notes that implementation of the DCF method and the Risk Premium/CAPM method to the "All-Industry Average" for the 900 companies included in the Business Week "Investment Outlook Scoreboard 2003," and to a group of telecommunications companies, results in a recommended 9.5% cost of equity. Lastly, the Ratepayer Advocate notes Mr. Rothschild's observation that if strict adherence to purely competitive pricing were followed for Verizon NJ's UNE investment, the recommended weighted cost of capital would be substantially lower than 7.10% because Verizon NJ makes little, if any incremental investment to provide UNEs. *See* Attachment A, RAR-ROR-26 and RAR-ROR-34. In such a situation where the incremental investment is zero, a lower cost of capital is appropriate. Rothschild Testimony, pp 2-4, *Exhibit R-RPA-2*.

The Ratepayer Advocate submits that Mr. Rothchild's recommendations are, on their face, more reasonable than Dr. Vander Weide's recommendations, which improperly ignores the low-cost of short-term debt, resulting in a substantially inflated cost of equity further enlarged by the addition of an improper extra risk premium. As Mr. Rothchild observed, if the Board were to award Verizon NJ the 15.98% return on capital proposed by Dr. Vander Weide, this would be equivalent to allowing the company to earn a 31.19% return on the equity of its real capital structure. A 31.2% return on equity is well beyond the level that firms operating in a competitive environment could reasonably expect to maintain. Dr. Vander Weide's weighted cost of capital recommendations are predicated on his assertion that in a competitive market, higher cost of capital is appropriate. However, on cross-examination, Dr. Vander Weide admitted that wireless telecommunications is a competitive business. T722:5-8 (2/20/04). But, the average earned return is a negative seven. T 723:4-21 (02/20/04). See also Exhibit R-ATT- 32, at 32-35 (a presentation by Dr. Vander Weide on trends in Telecom wherein he states a majority of wireless carriers are profitable which means many are not and billions are being invested). This means that in a competive market companies earned return are lower than the cost of equity.

# 1. Dr. Vander Weide's Reliance on Analysts Reports Is Flawed

Dr. Vander Weide mechanically uses analysts' five-year earnings per share forecasts as if they are

the proxy for investors' long-term growth expectations. Use of such forecasts as the proxy for long-term growth expectations, has never been appropriate in a DCF model. In a report to its subscribers, I/B/E/S stated that the average revision for stocks in the S&P 500, which make up approximately 75% of the market value of stocks traded on the New York Stock Exchange, is 12.9% from the beginning to the end of the year in which the forecast is made. Analysts revise their estimates 6.3% in the first half and 19.5% in the second half of the year. What is apparent is that analysts do not sufficiently revise their optimistically biased forecasts in the first half, and then almost triple the size of the revisions, usually downward, in the second half of the year. Using analysts' consensus forecasts overstate the growth rate that is anticipated by the consensus of investors.

The inapplicability of analysts' growth rates in the DCF formula is further illustrated by Dr. Vander Weides' elimination of a substantial number of companies from his comparative group simply because the DCF result he obtained was within a range he felt reasonable. *Dr. Vander Weide Direct Testimony, Attachment A.* Through such an elimination process, he negates the results of his DCF analysis and instead distills the results to one that is merely dependent upon the cut-off of his choosing.

Dr. Vander Weide improperly bolsters his cost of equity recommendation by using analysts' five year earnings per share growth rates in the DCF formula knowing that it would overstate the growth rate and therefore overstate the cost of equity.

# B. Capital Structure/Cost of Debt.

Ideally, the Board should use the capital structure for Verizon NJ that would produce the lowest cost of capital in the long run for the UNE operation of Verizon NJ for ratemaking purposes. The Ratepayer Advocate believes that the consolidated capital structure is appropriate for the regulated telecommunications operations of Verizon NJ because it best reflects what management believes will produce the lowest overall cost of capital in the long-run, and it is appropriate for UNEs because it is the capital structure that best meets the foward-looking TELRIC approach. In computing the Capital Structure of Verizon Communications, Inc., the Ratepayer Advocate recommends that the Board use the actual accounting book

value of common equity for the reasons set forth in Mr. Rothschild Testimony. Those reasons are that the accounting book value is the proper value to use when evaluating how management actually raises capital and how trade-off computations are made to determine the overall cost of capital. The accounting book value capital structure produces a conservatively high estimate of the forward-looking percentage of common equity in the capital structure. Rothschild Testimony, p.13, *Exhibit R-RPA-2*.

Although Verizon NJ's witness, Dr. Vander Weide claims that a market value capital structure must be used, the Ratepayer Advocate's witness, Mr. Rothschild points out that if the Board were to use a market value capital structure approach such as Dr. Vander Weide is suggesting, it would entail including increases and decreases in the stock prices rather than the actual investment made by the company. The market value of common stock is simply the stock price multiplied by the number of shares outstanding. *Id.*, p.14. Conversely, the book value investment fully reflects the actual investment made by equity investors in a company because it includes both the original invested capital and retained earnings. *Id.* In determining the overall cost of capital, a book value capital structure will more appropriately assess the value of a company's equity, long-term debt and short-term debt. Therefore, the Ratepayer Advocate recommends that the Board reject a market value capital structure for determining the cost of debt.

The Ratepayer Advocate submits that the cost of capital must be TELRIC compliant and forward looking, and therefore, the cost of debt must reflect costs of debt that would be incurred by a company that were now purchasing mostly new equipment consistent with the TELRIC methodology. As noted in the Ratepayer Advocate's witness, Mr. Rothschild's Testimony, the current cost rate for Verizon NJ if it were to issue debt today would be 6.06%. This recommendation is based upon taking a 30-year U.S. treasury bond cost rate of 4.89% and adding a 1.17% interest rate spread between U.S. treasury bonds and A2 rated corporate debt, as obtained on the Bonds Online website, which resulted in a cost of debt of 6.06%. This recommendation was compared with the long-term bond issued by a Verizon regulated telephone company, Verizon New York, Inc. as reported in BondsOnline. The actual cost of a Verizon New York non-callable bond that matures on 12/15/2030, produces a yield to maturity of 6.088%. This number confirms the reasonableness of using the 6.06% interest rate in the cost of debt analysis. *See* Rothschild Testimony, p. 29,

#### Exhibit R-RPA-2.

The use of short-term debt is essential in providing a company with a substantial amount of financing at a low cost. The cost of short term debt was set to 1.14% based upon Verizon NJ's response to RAR-ROR-3. *See* Attachment A.

In addition, a book value capital structure also assesses and adds depreciation to the debt to equity mix ratio which serves as a barometer of cash flow that companies use to determine the cost of capital and effectively compete and is the reason why rating agencies look to a company's book value rather than market value whendetermining bond rating. Rothschild Testimony, p. 16, *Exhibit R-RPA-2*. Moreover, the TELRIC standard is used to arrive at the forward-looking capital structure that should be in place today. Market value capital structures are not the forward-looking capital structure that management would use to determine whether the next sale of capital should be debt or equity. Therefore, a market value capital structure would not be used by management to decide how to fund a new UNE investment today or in the near future. *Id.*, p.17.

As a result, the Ratepayer Advocate recommends that the Board adopt a cost of debt of 6.06% based upon a book value capital structure.

# C. The Cost Of Equity Should Be No Higher Than Required By Investors To Buy Or Hold the Stock.

The ratemaking process is designed to give a utility the opportunity to recover prudently incurred costs of providing utility service to its customers, including a return on its used and useful utility property. The Board's regulation of a utility's rate of return is intended to identify the fair and reasonable cost of capital invested in the utility's rate base, and to approve rates that give a soundly managed utility an opportunity to recover those costs. A utility's rate of return should be "reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties." *Bluefield Waterworks and Imp't. Co. v. Public Svc. Comm.*, 262 *U.S.* 679, 693 (1923); *accord Public Svc. Coord'd Transport Co. v. State*, 5 *N.J.* 196, 225 (1950). In this process, the Board must balance the competing interests of the rate paying public and Verizon NJ's investors to arrive at a figure "within the range

of reasonableness, the zone between the lowest rate not confiscatory and the highest rate fair to the public." *In re N.J. Power & Light Co.*, 9 *N.J.* 498, 534 (1952).

The cost of equity is the rate of return that must be offered to a common equity investor in order for that investor to be willing to buy the common stock. The rate of return is earned in two different ways. One part of the return is from a dividend. The other part of the return is through the change in the stock price. Investors buy stock to benefit from the total return. Total return is the sum of the dividend income and the profit (or loss) obtained from the change in the stock price. While it is uncommon in the utility industry, many companies do not pay a dividend at all.

Yet, investors are willing to buy the stock if they feel that the likely capital appreciation will offset the lack of any dividend income. A fair return on equity for utility investors is the return investors require to hold or acquire that utility's common stock. Any return higher than necessary to meet investors' requirements would provide them with an unexpected windfall at the expense of ratepayers who would be overcharged for utility service. The investors' return requirement would normally be sufficient to permit the utility to maintain its financial integrity and to attract additional capital. The minimum required return on common equity is the cost of common equity. The cost of common equity must be estimated through analyses of capital market behaviors, as investors do not directly specify the return they require on their common stock investments.

D. The Cost Of Equity Recommendation Of The Ratepayer Advocate Is Properly Calculated And Based On Methodologies Accepted By The Investment Community, Whereas The Company's Cost Of Equity Recommendation Is Based On Flawed Methodologies And Improper Calculations.

#### 1. DCF Methods

The basic formulation of the DCF method is probably the most widely used approach to return on equity determination in utility rate proceedings. This model states that the percent return expected and, therefore, required by investors equals the expected dividend yield, which is the annualized dividend by market price, plus the expected annual rate of growth of dividends per share. It is applied by implementing the following formula:

Cost of equity = dividend yield + future expected growth Where growth refers to the future sustainable growth rate in dividends, earnings, book value and stock price. Rothschild Testimony, p. 31, *Exhibit R-RPA-2*.

The DCF model has been used for many years, and the constant growth form of the DCF model is more widely used than any other approach to determining the cost of equity. Implementation of the DCF model in utility rate proceedings starts out with the same D/P + g, or dividend yield plus growth formula. Also, most generally agree that the growth rate "g" must be representative of the constant future growth rate anticipated by investors for dividends, earnings, book value, and stock price.

The record in this proceeding shows that the Ratepayer Advocate's witness, Mr. Rothschild's DCF results are the product of appropriate methodology and relevant current data. Mr. Rothschild derived his 9.50% cost of equity recommendation using the widely recognized DCF methodology and the Risk Premium/CAPM model. As explained by Mr. Rothschild, "[s]tock analysts and textbooks recognize that generally the most accurate way to estimate the sustainable growth rate in a constant growth DCF method is to use what is usually referred to as the retention growth, or "b x r" method." *Rothschild Testimony*, *Appendix 2, p. 36*.

The "b x r" method is best implemented by multiplying the *future expected* return on book equity by the retention rate that is consistent with both the future expected return on book equity and the dividend rate used to compute the dividend yield. Also, future sustainable growth should include an increment of growth to allow for the impact of sales of new common stock above book value. *Id*.

In the textbook, *Investments*, by Bodie, Kane and Marcus (Irwin, 1989) at page 478, expected growth rate of dividends is described as follows:

How do stock analysts derive forecasts of g, the expected growth rate of dividends? Usually, they first assume a constant dividend payout ratio (that is, ratio of dividends to earnings), which implies that dividends will grow at the same rate as earnings. Then they try to relate the expected growth rate of earnings to the expected profitability of the firm's *future* investment opportunities.

The exact relationship is

g = b X ROE

where b is the proportion of the firm's earnings that is reinvested in the business, called the **plowback ratio** or the **earnings retention ratio**, and

ROE is the rate of return (return on equity) on new investments. If all of the variables are specified correctly, [the] equation . . . is true by definition, . . .

Rothschild Testimony, Appendix 2, p. 37.

The Ratepayer Advocate's cost of equity recommendation is based upon the application of the DCF method. The Ratepayer Advocate's cost of equity recommendation used and applied the DCF method in two different ways. One way is a single-stage, or constant growth DCF model in which one adds a growth rate that is constructed to meet the rigorous requirements of the constant growth formula. The second DCF analysis is a multi-stage method. Both approaches to the DCF method are dependent upon an estimate of what common equity investors expect for future cash flow. Rothschild Testimony, Appendix 2, p. 29-30, *Exhibit R-RPA-2*.

# 2. Implementation of Single-Stage DCF

As noted in Mr. Rothschild's Testimony, the first step applied the DCF method to both the group of telecommunication companies chosen by the Company and to a group of telecommunication companies consisting of all the companies in the Eastern edition of Value Line. Then, the current quarterly dividend rate for each company is examined and multiplied by 4 to arrive at the current annual rate. This number was then converted to a dividend yield by dividing it by the stock price of each company. The stock price used was determined two different ways. One way was to take the actual current stock price. The second way was to take the average of the high and low stock price for the year ending December 31, 2001. Then, the dividend yield was increased by adding one-half the future expected growth rate. This upward adjustment to the dividend yield is necessary because the DCF formula specifies that the dividend yield to be used is equal to the dividends expected to be paid over the next year divided by the market price. After this adjustment to increase the dividend yield, the yield is equal to an estimate of dividends over the next year.<sup>3</sup> To each dividend yield result, Mr. Rothschild added one-half the future expected growth rate.

The growth rates are derived by using the constant growth, or k = D/P + G, version of the DCF

<sup>&</sup>lt;sup>3</sup> The complex version does not directly use dividend yields. Instead, it determines the present value of each dividend payment as a discounted cash flow.

method from the internal, or retention growth rate, or "b x r" method where "b" represents the future expected retention rate and "r" represents the future expected earned return on book equity. In addition to the "b x r" growth caused by the retention of earnings, he added an amount to recognize that growth is also caused by the sale of new common stock in excess of book value.

## 3. Implementation Multi-Stage DCF

As a second step, a multi-stage DCF analysis is performed as described in Mr. Rothschild's Testimony. Rothschild Testimony, Appendix 2, *Exhibit R-RPA-2*. In the analysis, a DCF analysis is performed in two stages, the first based upon short-term growth projections for the 2001 through 2005 period, and the second based on projections 40 years into the future.

For the first-stage determination, as explained in Mr. Rothschild's Testimony, a Value Line's estimates of earnings and dividends per share and earnings per share for 2002 through 2006 for the companies examined is used. Since Value Line does not show a specific earnings and dividend projection for every year from 2000-2005, Mr. Rothschild interpolated from the available data, and mechanically used Value Line's projections for the period. *Rothschild's Testimony*, *Appendix 2*, *p. 3*For the second stage of the multi-stage or non-constant DCF model, Mr. Rothschild determined future earnings by multiplying the future book value per share by the future expected earned return on book equity, using the same future expected return on book equity used in the constant growth, single-stage or "simplified" DCF version. Projections were made for 40 years into the future, and relied on a constant dividend payout ration set equal to the payout ratio for 2002. *Id.* at p. 42. Mr. Rothschild derived the estimated future stock price from the projected book value using the same market-to-book ratio at the time of sale as exists today. The stock price used was both the spot stock price as of October 31, 2002, and the average stock price for the year ended October 31, 2003. *Id.* at p. 66. The cost of equity indicated by the DCF method is between 8.48% and 9.30% for the group of telecommunications companies chosen by the company witness. Rothschild Testimony, Appendix 2, p. 42-43, *Exhibit R-RPA-2*.

# E. Analysis of Company Position Regarding Cost of Capital

Verizon NJ's witness, Dr. Vander Weide, recommends an overall cost of capital of 15.98%. The Ratepayer Advocate submits that Verizon NJ and Dr. Vander Weide have ignored the capital structure actually chosen by management to finance the telecommunications operations of Verizon. Instead, they improperly support the use of a capital structure in which the market value of the equity capital is used. The Ratepayer Advocate submits that there are two basic choices that can realistically be used to determine the proper capital structure to use for determining the overall cost of capital. One is to use the capital structure actually implemented by management and the other is to challenge management by showing that the capital structure they selected is sub-optimal. The Ratepayer Advocate recommends that the capital structure based on book value be used because if a competitor were to attempt to replicate the used and useful telecommunications assets utilized by Verizon NJ to provide UNE service, the competitor would strive to raise the capital in a manner that would produce the lowest overall cost of capital in the long-run. Minimizing the log run overall cost of capital is the only way to comply with the FCC's TELRIC requirements. As explained in Mr. Rothschild's Testimony, the actual capital structure selected by the management of Verizon Communications, Inc. was reviewed and after such review, Mr. Rothschild concluded that it was a reasonable proxy to use for an optimal capital structure. In contrast, Verizon NJ relies upon Dr. Vander Weide, and his capital structure analysis on "market value," which is not forward-looking and not TELRIC compliant. As explained in Mr. Rothschild's Testimony, if the "market value" capital structure suggested by Verizon NJ were used for UNE rates, but the book value capital structure were used for the regulated portion of Verizon NJ's operations, consistency would require that when determining the overall cost of capital for Verizon NJ, a downward adjustment be made to the book value to recognize that a higher allocation of equity capital had been made to the UNE operations.

The Ratepayer Advocate submits that any responsible economic analysis of a market based capital structure would have to consider this value increment. In addition, such analysis should consider the existence of short-term debt in the financing equation. Short term debt is a very low cost of capital that is currently used extensively by Verizon to keep the cost of equity at reasonable levels. Even though Verizon Communications,

Inc., has decided to obtain almost \$10 billion of its total financing through short-term debt, Verizon NJ's witness, Dr. Vander Weide's recommendations are based upon the improper assumption that no short-term debt would be used by management building a new telecommunications system today. Currently, the cost of short term debt to Verizon is 1.14%. *See* RAR-ROR-3, Attachment A. This omission is critical both because of the magnitude of this omission and because of the very low cost associated with short-term debt. Verison NJ's witness, Dr. Vander Weide, has also used an improper cost rate for long-term debt and has based his long-term debt on the cost rate for "A" rated debt but failed to determine if the source of his data included the interest rate of callable bonds. *See* RAR-ROR-36(c), Attachment A. Drops in interest rates will affect the market price on callable bonds versus non-callable bonds. Moreover, his cost of long-term debt is a mismatch to his recommended capital structure. The Ratepayer Advocate submits that Mr. Rothschild correctly notes that if a telecommunications company were to finance its assets with 75% equity, its cost of debt would be lower than the cost for an "A" rated company.

The Ratepayer Advocate submits that there are many problems with Dr. Vander Weide's implementation of the DCF method. Two of the largest problems with Dr. Vander Weide's DCF method are:

1) he uses a constant growth version of the DCF model, but used a proxy for long-term growth based solely on earnings per share growth forecast for the five years from 2002 to 2007, and 2) he arbitrarily eliminates companies from his DCF analysis if the DCF indicated cost of equity was outside of a range he felt reasonable. Through such an elimination process, he negates the results of his DCF analysis and instead distills the result to one that is merely dependent upon the cut-off range of his choosing. This is particularly important because by eliminating any DCF result that is either below the "A" rated bond interest rate or is above 20%, he assures that his DCF result will always be close to mid-way between "A" rated bond rate and 20%, irrespective of whether or not there is any validity to his DCF computations. All these issues are discussed in Mr. Rothschild's Testimony. See Rothschild Testimony, pp. 59-60, Exhibit R-RPA-2. While DCF results below an A rated bond interest rate are somewhat questionable, by eliminating such low results one improperly build in an upward skewing of the result. Verizon NJ's recommendation is upwardly biased because the upside filter is much further away from the true cost of equity than to any downside filter. Furthermore, even if analysts' reports did

not contain this upward bias that they are known to have, the five-year growth rate is not the long-term sustainable growth rate required for use in the constant-growth form of the DCF model.

Although Verizon NJ's witness, Dr. Vander Weide, provided a copy of a study he conducted in the 1980's to support the use of analysts' forecasts in the DCF model, as pointed out in Mr. Rothschild's Testimony, this study does not address the accuracy of analysts' growth rates for use in a DCF model, and it does not compare the use of an analysts' five-year growth rate with the use of more sophisticated models such as the comparison of the sustainable growth rate obtained by using the *future expected* value of "r" in a "b x r" (or retention rate times future expected return on book equity) computation. Mr. Rothschild notes that in the past Dr. Vander Weide has objected to the use of a "b x r" method in which the value of "r" is only based on the mechanical use of an historic earned return. As explained in his testimony, Mr. Rothschild has never recommended a cost of equity using a DCF method that merely accepts the historic earned return on equity as a number to use in the DCF model. This distinction is very important, since a study similar to the 1980 Dr. Vander Weide study noted that when the future estimate for "r" is used, such as Mr. Rothschild has done in his DCF model, the conclusion changes. One commonly quoted study was done during the 1980's by Gordon, Gordon and Gould, "Choice Among Methods of Estimating Share Yield, the Journal of Portfolio Management," in which the authors concluded that a "b xr" approach based upon future expected value of "r" would likely have been "as good or better" than all of the other growth rate measures they tested.

Moreover, in contrast to Dr. Vander Weide's assertions, as explained in Mr. Rothschild's testimony, there are numerous studies that specifically show the inaccuracy of analysts' forecasts. *See* Rothschild Testimony, p.72, *Exhibit R-RPA-2*. One such study is presented in Chapter 5, of the book "*Contrarian Investment Strategies: The Next Generation*," by David Dreman, Simon & Schuster, 1998. Analysts forecasts help explain stock prices which are different from properly quantifying a future expected growth rate. Analysts' forecasts have many flaws, and are generally upwardly biased. Another study by Eric Lufkin found that between 1982 and 1997, analysts overestimated the growth of earnings of companies in the S&P 500 by a startling 188%. The actual growth was 7.8% annually, while the projected growth at the beginning of each year was 21.9%. As a result, the Ratepayer Advocate submits that while the forecasts might be able to help

predict stock prices, the only reasonable conclusion to reach is that using analysts' five-year per share growth rates in the DCF formula will only overstate the growth rate and therefore overstate the cost of equity.

An excerpt from the UBS Investment Research Report on Verizon Communications, Inc., R-ATT-17, states: "We are maintaining our neutral 1 rating and 12 month price target of \$36 per share based on our longterm model and our DCF valuation which employs an 8% discount rate and a 2% perpetual FCF growth assumption." Similarly in addressing company share values the Banc of America Securities report on Verizon Communications., Inc., states under the section that reads "Sector View: Underweight," the following: "Valuation and target price analysis: Our \$35 target is derived from our ten-year DCF using an 8.3 percent WACC (Weighted Average Cost of Capital) and 6x terminal multiple in conjunction with our SOTP analysis." On cross examination, Dr. Vander Weide admitted that a weighted average cost of capital of 8.3 percent is what Bank of America Securities has estimated for Verizon Communications, Inc. T 526:L11-19 and T527:L13-21(2/19/2004). Exhibit R-ATT-19. Mr. Rothchild's analysis and cost of capital recommendations are further supported by Exhibit R-ATT-20 which is a valuation of Verizon Communications, Inc., by Citigroup Smith Barney dated October 28, 2003. On page 9 under the heading "Valuation," the report concluded; "we have set a price target \$36 per share for VZ (Verizon Communications, Inc.). Our target price is based on a combination of DCF analysis and trading multiples. Our DCF uses an average WACC (Weighted Average Cost of Capital) of 7.9 percent and a consolidated terminal growth rate of 1.4 percent to arrive at a fair market value of \$36 per share."

The Ratepayer Advocate believes that Dr. Vander Weide also improperly used a quarterly discounting adjustment in his DCF model. The quarterly model is incorrect because it is incomplete. In Rothchild's Testimony, he correctly states that when a company disburses cash to pay stockholders, that action suppresses its growth, because it removes the cash from that company that much sooner. Therefore, any upward adjustment to account for investors' receipt of dividends quarterly is offset by the lower growth. If compounding is considered ,then the return on equity that needs to be authorized so that a company can actually earn 10% per year, is less than 10%. In fact, if compounding daily a company needs only to be allowed to earn 9.532% per year. This is because 9.532% per year divided by 365 is 0.026% per day, which

compounded daily is 10%. To use the DCF model correctly, if one wishes to consider the quarterly compounding effect of dividends, then it is equally appropriate to consider the daily compounding of the return on equity that a company receives.

## F. Risk Premium/CAPM Method

The Risk Premium/CAPM method estimates the cost of equity by analyzing the historic difference between the cost of equity and a related factor, such as the rate of inflation or the cost of debt. *See* Rothschild's Testimony, Appendix 2, p. 43.

Of critical importance when implementing the risk premium method is to take into account that risk premiums have declined in recent years. Federal Reserve Chairman Alan Greenspan made a speech on October 14, 1999, entitled "Measuring Financial Risk in the Twenty-First Century" supporting this point. Chairman Greenspan stated:

That equity risk premiums have generally declined during the past decade is not in dispute. What is at issue is how much of the decline reflects new, irreversible technologies, and what part is a consequence of a prolonged business expansion without a significant period of adjustment. The business expansion is, of course, reversible, whereas technological advancements presumably are not.

*Id.*, p. 44.

It is evident that the financial investment community shares Chairman Greenspan's view on the reduction in risk premiums. An article that appeared in the April 5, 1999 issue of *Business Week* agreed with this point:

The risk premium is the difference between the risk-free interest rate, usually the return on U.S. Treasury bills, and the return on a diversified stock portfolio. Over more than 70 years, the return to stocks averaged 11.2%, and T-bills, just 3.8%. The difference between the two returns, 7.4%, is the risk premium. Economists explain this extra return as an investors' reward for taking on the greater risk of owning stocks. Most market watchers believe that in recent years, the premium has fallento somewhere between 3% and 4% because of lower inflation and a long business upswing that makes corporate earnings less variable. (Emphasis added)

Rothschild's Testimony, Appendix 2, pp. 44-45.

The Ratepayer Advocate notes that Mr. Rothschild used both an "inflation risk premium" approach and a "debt risk premium" approach. The inflation risk premium approach, based on an analysis of the earned total return on equity investments compared to the inflation rate, indicated a cost of equity between 8.94% and

10.00%.

*Id.*, p. 54.

The Ratepayer Advocate submits that the inflation premium method is accepted by the investment community as a valid approach to estimating the cost of equity. A book entitled *Stocks for the Long Run*<sup>4</sup> examined the real returns achieved by common stocks from 1802 through 1997. The conclusion in the book is that equity returns in excess of the inflation rate have been very similar in all major sub-periods between 1802 and 1997, while the risk premium in between bonds and common stocks has been erratic. Page 11 of this book says:

Despite extraordinary changes in the economic, social, and political environment over the past two centuries, stocks have yielded between 6.6 and 7.2 percent per year after inflation in all major subperiods.

The book then says on page 12:

Note the extraordinary stability of the real return on stocks over all major subperiods: 7.0 percent per year from 1802-1870, 6.6 percent from 1871 through 1925, and 7.2 percent per year since 1926. Ever since World War II, during which all the inflation in the U.S. has experienced over the past two hundred years has occurred, the average real rate of return on stocks has been 7.5 percent per year. This is virtually identical to the previous 125 years, which saw no overall inflation. This remarkable stability of long-term real returns is a characteristic of mean reversion, a property of a variable to offset its short-term fluctuations so as to produce far more stable long-term returns.

Continuing on page 14, Stocks for the Long Run says:

As stable as the long-term real returns have been for equities, the same cannot be said of fixed-income assets. Table 1-2 reports the nominal and real returns on both short-term and long-term bonds over the same time periods as in Table 1-1. The real returns on bills has dropped precipitously from 5.1 percent in the early part of the nineteenth century to a bare 0.6 percent since 1926, a return only slightly above inflation.

The real return on long-term bonds has shown a similar pattern. Bond returns fell from a generous 4.8 percent in the first sub period to 3.7 percent in the second, and then to only 2.0 percent in the third.

The book explains some of the reasons why bond returns have been especially unstable. Page 16 says:

<sup>&</sup>lt;sup>4</sup> Stocks for the Long Run by Jeremy J. Siegel, Professor at Wharton. McGraw Hill, 1998. According to the book cover, Professor Siegel was "... hailed by Business Week as the top business school professor in the country...".

The stock collapse of the early 1930's caused a whole generation of investors to shun equities and invest in government bonds and newly-insured bank deposits, driving their return downward. Furthermore, the increase in the financial assets of the middle class, whose behavior towards risk was far more conservative than that of the wealthy of the nineteenth century, likely played a role in depressing bond and bill returns.

Moreover, during World War II and the early postwar years, interest rates were kept low by the stated bond support policy of the Federal Reserve. Bondholders had bought these bonds because of the widespread predictions of depression after the war. This support policy was abandoned in 1951 because low interest rates fostered inflation. But interest rate controls, particularly on deposits, lasted much longer.

The book then provides a conclusion on page 16 that:

Whatever the reason for the decline in the return on fixed-income assets over the past century, it is almost certain that the real returns on bonds will be higher in the future than they have been over the last 70 years. As a result of the inflation shock of the 1970's, bondholders have incorporated a significant inflation premium in the coupon on long-term bonds.

The Ratepayer Advocate submits that the record reflects that Mr. Rothschild correctly determined the cost of equity using the debt risk premium method by separately determining the proper risk premium applicable to long-term treasury bonds, long-term corporate bonds, intermediate-term treasury bonds and short-term treasury bills. This approach considered a wide array of data points across the yield curve. Therefore, the results are less impacted by a temporary imbalance that may exist in the debt maturity "yield curve". *See* Rothschild Testimony, Appendix 2, p. 49, JAR Schedule-7.

## 1. Analysis of Company Position On Risk Premium

Verizon NJ's witness Dr. Vander Weide, argues that a high risk premium should be added to the overall cost of capital to compensate for his perception of the extra risk caused by the lack of long-term contract between Verizon NJ and UNE customers. Based upon Mr. Rothschild's Testimony, the Ratepayer Advocate submit that Dr. Vander Weide's computations do not reflect reality because they do not consider the actual risk exposure and as explained further below, the rationale relied upon by Dr. Vander Weide is simply wrong. Dr. Vander Weide implements the so called leasing risk premium by adding a 3.95% leasing risk premium to the overall cost of capital to arrive at a cost of capital recommendation for UNEs of 15.98%.

As explained in Mr. Rothschild's Testimony, multiple infirmities with adding the leasing risk premium

to the cost of capital rather than to the cost of equity is completely inappropriate in this case because it ignores that: a) Verizon NJ has essentially not put forth any additional funds that would be at risk to service UNEs, b) cancellation of the lease would have no impact since retail customers would still have to obtain telecommunications service either through another wholesale provider or directly through Verizon NJ; c) the facilities could be re-deployed to serve future growth; d) over-capacity is built into the system and included in the cost determination of regulated retail rates; e) the ability of a customer to leave the system without notice is already a feature of normal retail customers and the risk if any has already been included in the cost of capital; f) the proper mechanism for Verizon NJ to receive a return of its investment is through the proper selection of depreciation rates rather than through an abstract "risk adjustment" to the cost of equity; and g) the only risk that should be included in the cost of capital is nondiversifiable risk, risks that do not influence the cost of capital. The Ratepayer Advocate also submits that risk premium data should be calculated using the geometric average results as opposed to the arithmetic average. The arithmetic average of returns is computed by taking the percentage change over a specific period and computing an arithmetic average of those returns.

The geometric average is computed by determining the compound annual average return from the beginning of the period to the end of the period being examined. Arithmetic average returns overstate (on an absolute value basis) the actual returns received by investors. The Ratepayer Advocate notes that Mr. Rothschild observes that the more variable historic growth rates have been, the more the method exaggerates actual growth rates. Arithmetic average returns ignore the impact of compound interest. For example, if a company were to have a stock price of \$10.00 in the beginning of the first year of the measured period and a \$5.00 stock price at the end of the first year an arithmetic average approach would conclude that the return earned by the investor would be a loss of 50% [(\$5-\$10)/(\$10)]. If, in the second year, the stock price returned to \$10.00, then the arithmetic average would compute a gain of 100% in the second year [(\$10-\$5)/(\$5)]. The arithmetic average approach would naively average the 50% loss in the first year with the 100% gain in the second year to arrive at the conclusion that the total return received by the investor over this two year period would be 25% per year [(-50% +100%)/2 years]. In other words, the arithmetic average approach is so inaccurate that it would conclude the average annual return over this two-year period was 25%

per year even though the stock price started at \$10.00 and ended at \$10.00. The geometric average would not make such an error. It would only consider the compound annual return from the beginning \$10.00 to the ending \$10.00, and correctly determine that the annual average of the total returns was not 25% but was zero. *See* Rothschild Testimony, Appendix 2, pp. 55-56

The arithmetic mean has been singled out by numerous sources as a method that will result in an answer that is upwardly biased. The U.S. Securities and Exchange Commission ("SEC") and Value Line have both recognized that the only proper way to measure long-term historic actual earned returns is to use the geometric mean. *Id.*, p. 54.

In order to protect investors from misleading data, the SEC requires mutual funds to report historic returns by using the geometric average only. The arithmetic average is not permitted. The geometric average, or SEC method, has the compelling advantage of providing a true representation of the performance that would have actually been achieved by an investor who made an investment at the beginning of a period and reinvested dividends at market prices prevailing at the time the dividends were paid. *Id.*, p. 56.

On May 9, 1997, Value Line issued a report entitled "The Differences in Averaging". This report was contained on pages 6844-6845 of the "Value Line Selection & Opinion" portion of its weekly mailings to subscribers. This report says that:

(t)he arithmetic average has an upward bias, though it is the simplest to calculate. The geometric average does not have any bias, and thus is the best to use when compounding (over a number of years) is involved.

Rothschild Testimony, Appendix 2, p. 59.

The Value Line report then goes on to provide examples that show why the arithmetic average overstates the achieved returns while the geometric average produces the correct result. A complete copy of this Value Line discussion is in Appendix B to Mr. Rothschild Testimony, *Exhibit R-RPA-2*.

In addition, from 1926 to 2001, the arithmetic average method produced an indicated risk premium that was about 2.5% higher for large company stocks versus long-term corporate bonds than the risk premium indicated by using the SEC, or geometric average method. *See* Rothschild Testimony, Appendix 2, p. 65.

Dr. Vander Weide posits that his cost of capital recommendation including the risk premium addition

is appropriate because (1) UNE rates are subject to regulation and Verizon doesn't have the opportunity to raise its UNE rates because they are rate regulated. T 729:1-4 (2/20/2004) and (2) CLECs can discontinue service at any time and reorder the service at a later time (otherwise referred to as leasing risk). The Ratepayer Advocate submits that both assumptions are simply not true. As a result, Dr. Vander Weide's recommendation for increasing the weighted cost of capital are based upon flawed and erroneous assumptions. While state commissions set UNE rates based upon TELRIC, Verizon NJ and CLECs are free to negotiate different rates and use them in their interconnection agreements. See Section 252(a) of the Act. Verizon NJ can negotiate long-term lease contracts with CLECs. Any such negotiated long term contract can be at rates higher or lower than the generic rates set by the Board. Verizon NJ simply refuses to negotiate longer term contracts to reduce or eliminate the perceived risk. T 771:14-21 & T 772:1-11 (2/20/04). Verizon NJ's failure to negotiate longer lease terms with higher rates undercuts the basis claimed for proposing an additional risk premium recommended by Verizon NJ. As a result, the Ratepayer Advocate recommends that the Board rejects Verizon NJ's proposed the cost of capital.

The Ratepayer Advocate notes that in 1997, the Board set the weighted cost of capital at 10.4% based upon in part that reflected a competitive market. If that cost of capital was adjusted to reflect conditions as of today, that rate would otherwise be consistent with the 7.10% weighted cost of capital recommended by the Ratepayer Advocate. The fact that Verizon NJ is asking for a substantially higher weighted cost of capital rate than it sought in 1997 even though lease risks existed then and the TELRIC rules have not changed undercuts their recommendation at this time. The sole objective of Verizon NJ is to raise UNE rates. The Board is well aware that the high rates set in 1997 lead to virtually no competition in New Jersey until such time as the Board revised those rates downward. The Ratepayer Advocate further submits that Verizon NJ has offered no evidence as to whether the 15.98% weightted cost of capital input it recommends is in fact within a range of TELRIC compliant inputs. With out such evidence, Verizon NJ has failed to meet its burden of proof and the Board can not adopt Verizon NJ's weighted cost of capital recommendation.

The Ratepayer Advocate recommends that the Board reject Verizon NJ's weighted cost of capital recommendation. The Ratepayer Advocate submits that, based upon the record evidence, Verizon NJ has

overstated the cost of equity by applying the constant growth version of the DCF model based upon the use of a non-constant growth rate that accepts without adjustment analysts' inflated growth rates which results in a recommended cost of equity of 13.95%. Such result is further improperly increased by adding an unrealistic leasing risk premium of 3.95% not just to the cost of equity, but to the overall cost of capital. If Verizon NJ's recommendation were to be adopted, it would provide Verizon Communications, Inc., the opportunity to earn 31.19% on its UNE investment. A return of 31.19% is way beyond the level that could ever result in a truly competitive marketplace.

In conclusion, the Ratepayer Advocate recommends that the Baord adopt a weighted cost of capital of 7.10% as recommended by the Ratepayer Advocate.

## POINT III. TELCORDIA SWITCHING MODEL

# THE RATEPAYER ADVOCATE RECOMMENDS THAT THE BOARD REJECT THE TELECORDIA MODEL AS DEFECTIVE.

The Ratepayer Advocate submits that the Telcorida switching model handling of the five vertical features for which no investment is available for certain switch manufacturers is improper and otherwise arbitrary and capricious. Rates are unreasonably inflated by Verizon NJ's action. The more troubling matter is that Verizon NJ knew about this issue for years and never disclosed this matter. This non-disclosure reflects a pattern whereby Verizon NJ does not provide current, complete, and accurate information so that a fully informed decision can be made. This undisclosed practice inflates the port rate by \$1.27 and previously inflated the originating and terminating minutes of use for switching when vertical features were included in the minute of use calculation. Verizon NJ simply lacks candor, especially when such lack of condor means higher UNE rates. No clearer example of lack of candor exists then in the cross examination of Ms. Prosini on February 18, 2004. In response to a question about what effect does eliminating negative net salvage value on depreciation costs, Ms Prosini gave vague and evasive responses. Utlimately, a specific transcript request was asked for. T 463. The request asked:

Request We have been asked to detail the net effect on the rates by, let's see, in the first instance, changing the negative net salvage value to zero and then further to identify the effect if the salvage -- if the net salvage turns positive

Response Changing the net salvage values to zero or to positive net salvage has little if any impact on rates. The impact on the capital cost is less than one half of one percent. This, however, is offset by an increae to the expense factors to account for and insure recovery of the cost of removal.

The Ratepayer Advocate submits that elimination of negative net salvage will reduce depreciations cost which in turn will lower UNE rates. Verizon NJ's response only states that the impact on capital costs is less than one half of one percent. The impact is downward. In a further attempt to muddy the waters, Verizon NJ then argues expense factors would increase to account for and insure recovery of the cost of removal. The Board is only reviewing two inputs, cost of capital and depreciation. The Board did not ask Verizon to adjust expense factors. The Ratepayer Advocate respectfully recommends that the Board rejects Verizon NJ's

arguments based upon the evidence in the record and its impact on Verizon NJ's credibility.

The Ratepayer Advocate also asks that the Board consider and weight the fact that Verizon NJ has stated publicly that it is loosing \$25 million in revenue per month due to UNE competition, but, at the same time, Verizonhas not undertaken any analysis of or cannot provide responses to numerous Transcript Requests made by Board Staff in this proceeding. T 760-762 (2/20/04). If Verizon NJ cannot provide this information, the Board lacks the necessary information to make a reasoned decision on the merits. More importantly, Verizon has not meet its burden of proof.

**CONCLUSION** 

As discussed above, the Raterpayer Advocate recommends that the Board reject Verizon NJ's

weighted cost of capital recommendation and accept the Ratepyer Advocate's weighted cost of capital of

7.10%, reject Verizon NJ's proposal to use GAAP and adjust the depreciation lives to the mid point between

the lives set in 2001 and the high end range established by the FCC, acknowledge that the Telcordia switching

model's treatement of certain vertical features is flawed and improperly inflates the port rate, and make any

adjustment in rates interim subject to true up and refund pending completion of further proceedings.

Respectfully Submitted,

SEEMA M. SINGH, ESQ. RATEPAYER ADVOCATE

By:

Ava-Marie Madeam, Esq. Asst. Deputy Ratepayer Advocate

Maria Novas-Ruiz, Esq.

Asst. Deputy Ratepayer Advocate

Dated: March 1, 2004

40

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-ROR-3 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 1

REQUEST: Please provide:

- (a) the current cost of short-term debt to Verizon New Jersey
- (b) the current cost of short-term debt to Verizon Communications, Inc.

RESPONSE: (a) Verizon New Jersey – 1.133%

(b) Verizon Communications – 1.135%

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-ROR-19 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 1

REQUEST: Page 5, lines 7-14 of Dr. Vander Weide's direct testimony provides

a list of four economic principles that are claimed to have been determined by the FCC. Separately for each of these four economic principles, provide copies of the sections of FCC decisions and any other documentation relied upon by Dr. Vander

Waids in formulating conclusions

Weide in formulating conclusions.

RESPONSE: Footnote 1 of Dr. Vander Weide's direct testimony references

appropriate FCC orders, paragraphs, and page numbers that support the economic principles listed on page 5, lines 7 - 14. Each of these documents is publicly available on the FCC's

website.

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-ROR-20 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 1

REQUEST:

Should competition to provide UNE service theoretically assume that a company who wants to purchase UNE service should be able to do so from multiple LEC's in any given geographic area? If not, please explain why not.

RESPONSE:

The question is unclear. To the extent Verizon NJ understands the question it responds as follows: Dr. Vander Weide recognizes that the FCC has stated that UNE rates must approximate the rates the incumbent LEC would be able to charge in a competitive market for UNEs (Local Competition Order at para. 738). UNE prices can only replicate prices that the incumbent LEC would be able to charge in a competitive market for UNEs if the cost of capital input in UNE studies is based on the assumption of full facilities-based competition. The FCC clarified this principle in its Triennial Review Order:

First, we clarify that a TELRIC-based cost of capital should reflect the risks of a competitive market. The objective of TELRIC is to establish a price that replicates the price that would exist in a market in which there is facilities based competition. In this type of competitive market, all facilities-based carriers would face the risk of losing customers to other facilities-based carriers, and that risk should be reflected in TELRIC prices. (Triennial Review Order, para. 680.)

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-ROR-34 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 1

REQUEST: Does VNJ build out its network to reflect fully CLEC forecasted

demand? Please fully explain your response. Please provide all workpapers, source data, and any other Documents that support or

are associated with this response.

RESPONSE: Verizon NJ makes facilities available to CLECs in accordance with

the requirements of the Telecommunications Act of 1996. It does

"build out" its network to meet specific "CLEC forecasted

demand".

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-ROR-36 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 2

REQUEST:

Please refer to Dr. Vander Weide's Direct Testimony at page 44, lines 15-16. Dr. Vander Weide states that the average yield to maturity on Moody's A-rated industrial bonds is 6.26 percent, as reported in the April 2003 *Mergent Bond Record* and that using this debt yield as an estimate of the cost of debt for a forward-looking cost study is conservative because it does not include the flotation costs that must be paid to issue the debt securities required to finance the building of facilities to provide unbundled network elements on a forward-looking basis.

- (a) Please explain what floatation costs are and why they were excluded. Please also state whether floatation costs were excluded from the cost of equity. If floatation costs were included in the cost of equity, please explain why such costs are included in the cost of equity but not the cost of debt.
- (b) Please provide the interest rate on A-rated industrial bonds as of the most currently available Mergent Bond Record and specify the date associated with that amount.
- (c) Please state if the 6.26 percent includes the yield to maturity on callable bonds.
- (d) Does Dr. Vander Weide agree that callable bonds with coupon yields above current market rates can have market yields higher that are higher than current market rates because of the risk that they could be called?

RESPONSE:

(a) Flotation costs include the underwriters' commissions, legal and accounting fees, printing expense, and other selling costs a company incurs when it issues securities to the public. All firms that have sold debt or equity securities in the capital markets have incurred some level of flotation costs. These costs are withheld from the proceeds of the sale of securities or are paid separately, and must be recovered over the life of the issue. Flotation costs are not included in the yield to maturity calculation on a bond. VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-ROR-36 WITNESS: VERIZON NEW JERSEY INC. PAGE 2 OF 2

(Cont'd:)

A debt flotation cost allowance was not included in Dr. Vander Weide's cost of debt recommendation because Dr. Vander Weide has limited information on debt flotation The information he does have indicates that debt flotation costs are approximately 10 basis points. Flotation costs were included in the cost of equity because the academic literature contains several excellent studies that quantify equity flotation costs. However, in this particular case, the impact of equity flotation costs amounts to only 10 basis points. Thus, equity flotation costs had a minimal Dr. Vander Weide's cost of impact on capital recommendation in this proceeding.

- (b) The most recent average interest rate on A-rated industrial bonds for November 2003 was 6.18% as published in the December 2003 issue of the Mergent Bond Record.
- (c) Dr. Vander Weide does not know if the 6.26% yield to maturity on A-rated industrial bonds includes the yield to maturity on callable bonds. However, he is confident that it accurately measures the debt costs A-rated industrial companies actually face when they issue debt securities. Companies will only issue callable bonds if they believe that it is the lowest cost alternative source of financing in the long run.
- (d) Dr. Vander Weide does *not* agree that callable bonds have coupon yields above current market rates. The yield to maturity on callable bonds <u>is</u> the current market interest rate on callable bonds. Companies will only issue callable bonds if they believe that it is the lowest cost alternative source of financing in the long run.

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-DEP-3 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 1

REQUEST: Please provide current, complete, and accurate copies of the

underlying data, work-papers, studies, and analyses underlying the statement that GAAP lives appropriate account for the anticipated impact of future technologies, at page 4, lines 6, 7 of Mr. Lacey's

testimony.

RESPONSE: The basis for Dr. Lacey's testimony is his expert opinion based

upon his educational background, over thirty years of professional experience and general industry knowledge. The statement

referred to above is not based upon specific quantitative data or a specific quantative analysis. Thus, there are no specific work

papers.

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-DEP-4 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 1

REQUEST: Please provide current, complete, and accurate copies of the

underlying data, work-papers, studies, and analyses underlying the statement that the specific deprecation lives and net salvages proposed by Verizon NJ . . . are fully consistent with the FCCs TELRIC requirements, at page . 4, lines 17, 20 of Mr. Lacey's

testimony.

RESPONSE: Dr. Lacey's expert opinion that Verizon NJ's proposed specific

deprecation lives and net salvages lives are fully consistent with the FCC's TELRIC requirements is based upon his review of those lives and his understanding of the TELRIC requirements. The

basis for his opinion is set forth in his testimony.

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-DEP-6 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 1

REQUEST: Referencing competition at page 5, line 10, please provide current,

complete, and accurate copies of the underlying data, work-papers, studies, and analyses of (1) competition that Verizon New Jersey faces and (2) the revenue effect in terms of lost revenue on Verizon NJ from the Board's UNE rates announced in December 2001

from then to the present.

RESPONSE: Dr. Lacey's reference to competition is based upon his

understanding of competition in New Jersey. His understanding is based in part upon the competition discussion set forth in Dr. Vander Weide's testimony. There are no specific workpapers,

studies or analysis that he has relied upon.

VERIZON NEW JERSEY INC. BPU DOCKET NO. TO00060356 RPA REQUEST #RAR-DEP-9 WITNESS: VERIZON NEW JERSEY INC. PAGE 1 OF 1

## **REQUEST**

- (a) Please provide current, complete, and accurate copies of all workpapers, studies, and analyses relied upon by Mr. Lacey in support of his statement . . . I understand that Verizon NJ looks at information from a variety of sources, including its own internal capital spending budgets and engineering plans concerning the retirement of equipment, at page 13, lines 14-16 of Mr. Lacey's testimony.
- (b) Please include current, complete, and accurate copies of all internal capital spending budgets and engineering plans from years 1999-2004, inclusive.
- (c) Please provide current, complete, and accurate copies of all workpapers, studies, and analyses relied upon by Mr. Lacey in support of his statement Verizon NJ also reviews information concerning the current and anticipated level of facilities-based competition, at page 13, lines 16-18 of Mr. Lacey's testimony.

#### RESPONSE:

- (a) and (c) Dr. Lacey's understanding is based upon his professional opinion and experience and communications with Verizon subject matter experts.
- (b) Verizon NJ objects to the request because it is overly broad. Notwithstanding the foregoing, infrastructure deployment reports for 1999-2002, including actual capital expenditure levels and network deployment plans are voluminous and available for inspection at Verizon NJ, 540 Broad Street, Newark, New Jersey. See AT&T-29.

## **Cooper Utilization**

## **Verizon - New Jeresy**

| Year | Working Channels<br>(Row 380) | Equipped Channels (Row 430) | Percent working |
|------|-------------------------------|-----------------------------|-----------------|
|      | (a)                           | (b)                         | (c) = a / b     |
| 1990 | 5,278,731                     | 8,480,311                   | 62%             |
| 1991 | 5,187,136                     | 8,589,411                   | 60%             |
| 1992 | 5,218,218                     | 8,676,657                   | 60%             |
| 1993 | 5,330,643                     | 9,199,185                   | 58%             |
| 1994 | 5,355,019                     | 9,118,022                   | 59%             |
| 1995 | 5,437,426                     | 9,121,540                   | 60%             |
| 1996 | 5,570,431                     | 9,019,215                   | 62%             |
| 1997 | 5,721,231                     | 9,006,822                   | 64%             |
| 1998 | 6,587,517                     | 9,971,137                   | 66%             |
| 1999 | 6,750,437                     | 10,122,755                  | 67%             |
| 2000 | 6,916,191                     | 10,272,290                  | 67%             |
| 2001 | 6,863,928                     | 10,298,603                  | 67%             |
| 2002 | 6,644,541                     | 10,350,679                  | 64%             |

Note: "Channels" equal central office terminations of copper. Central office terminations of fiber/digital carrier are reported separately.

# Verizon New Jersey Transmission Facilities Working Channels as a Percentage of Equipped Channels

|                                   | Total Study                                      | Total<br>Study  | Y1998<br>Total<br>Study | Y1999<br>Total<br>Study | Y2000<br>Total<br>Study   | Y2001<br>Total<br>Study   | Y2002 Total Study   |
|-----------------------------------|--|---|-------------------------|-------------------------|---|---|---|
| ADMIC Dow Title                   | Area   | Area  | Area                    | Area                    | Area  | Area  | Area  |
| ARIVIS ROW TILLE                  |  |   |                         |                         | 1   |   |   |
| Total Working                     | 7 517 350  | 8 012 484   | 10 845 387              | 12 008 298              | 13,648,59   | 14,298,12   | 14,229,545  |
| Onamiolo                          | 7,017,000  | 0,012,101   | 10,010,007              | 12,000,200              |   | Ü   | 1 1,220,0 10  |
| Total Equipped                    | 44 000 004                                       | 11,699,63   | 44.050.070              | 40 240 250              | 17,999,26   | 18,906,24   | 40 207 405  |
| Channels                          | 11,606,831                                       | 1   | 14,958,072              | 16,316,259              | U   | 1   | 19,207,185  |
| nt of Equipped<br>els Reported as | 650/   | 600/  | 720/                    | 740/                    | 769/  | 769/  | 74%   |
| n el                              | Channels  Total Equipped Channels  t of Equipped | Total Working Channels  7,517,350  Total Equipped Channels  11,606,831  t of Equipped s Reported as | Total Working           | Total Working           | Total Working Channels  7,517,350 8,012,484 10,845,387 12,008,298  Total Equipped Channels  11,606,831 1 14,958,072 16,316,259  t of Equipped s Reported as | Total Working Channels 7,517,350 8,012,484 10,845,387 12,008,298 9  Total Equipped Channels 11,606,831 1 14,958,072 16,316,259 0  t of Equipped S Reported as | Total Working Channels 7,517,350 8,012,484 10,845,387 12,008,298 9 0  Total Equipped Channels 11,606,831 1 14,958,072 16,316,259 0 1  t of Equipped S Reported as |

Row 0370 - Total Working Channels - Working Channels are on a 4 kHz bandwidth (single voice channel) basis. Working channels originating from a remote switch are treated the same as if the channels originated in the host central office. All Reports of working channels are counted on this 4kHz basis for purposes of this report. This amount equals the sum of rows 0380, 0390 and 0410 and is entered in whole numbers.

Row 0420 - Total Equipped Channels - Equipped channels are on a 4 kHz bandwidth (single voice channel) basis. Equipped channels originating from a remote switch are treated the same as if the channels originated in the host central office. This amount equals the sum of rows 0430, 0440 and 0460 and is entered in whole numbers.

Source:

In order for this type of entry to remain sustainable, and for customers to enjoy the

UNE-P must be reproduced via the UNE-L strategy. That is, loop portability must

become an operational and economic reality. If that benchmark is not attained, the

entry would likely diminish accordingly.

competitive market, and more importantly, consumers will suffer. Indeed, CLEC market

share would likely take a significant step backward and the benefits attributable to CLEC

HAS THE SEAMLESSNESS AND EFFICIENCY OF UNE-P HAD AN IMPACT ON COMPETITION IN THE LOCAL EXCHANGE MARKET IN NEW JERSEY

resultant economic benefits, the ease by which CLECs can participate in the market via

1

3

5

6

7

9 10 11 Q.

12 13

1415

A. It certainly has. In fact, as the charts included below demonstrate, CLEC penetration rates for New Jersey have more than tripled during this same time period while UNE-P growth has comprised nearly all of Verizon's competitive losses even after accounting for

IN MUCH THE SAME MANNER AS IT HAS NATIONALLY?

3

4

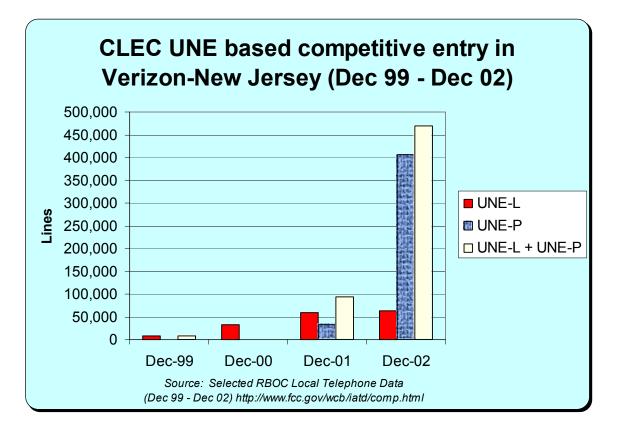
5

7

6

8

Moreover, the chart below highlights the fact that this aggressive growth results directly from UNE-P and its success in overcoming the operational (and economic) barriers that had restrained growth from resale and UNE-L alternatives previously.



- Q. ARE THERE IMPORTANT AREAS OF CONCERN UPON WHICH THE BOARD SHOULD FOCUS IN EVALUATING THE CHALLENGES THAT EXIST WITH A UNE-L DELIVERY STRATEGY, AND THE ABILITY OF CARRIERS TO ACTIVELY SERVE THE MARKET?
- A. Yes, there are. For purposes of clarity, I have identified three broad areas of concern the Board should consider when evaluating the operational and technical impairment that exists for carriers attempting to utilize UNE-L in order to serve mass market customers:

## (1) Loop Provisioning Issues:

While the FCC in its *TRO* focused primarily on "hot cuts" and the impairment resulting from the inability of CLECs to reliably, seamlessly and economically cut loops in large numbers (i.e., in a "batch"), this is but one of the provisioning issues giving rise to impairment without UNE switching. Issues related to untested provisioning processes operating at dramatically increased volumes on a day-to-day basis (not